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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/657,622 | 09/08/2003 | Michael Tod Morman | 18178 | 9454 |
| 22827 | 7590 | 08/29/2005 | EXAMINER | |
| DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449 | | | TORRES VELAZQUEZ, NORCA LIZ | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1771 | |

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,622

Applicant(s)

MORMAN ET AL.

Examiner

Norca L. Torres-Velazquez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18-30 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-30 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 011805 031405.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

33DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-6, 18-30 and 32 have been considered but are moot in view of the new ground(s) of rejection.
 - a. Claim 1 has been amended to recite that the absorbent material comprises absorbent particles and to recite that an average pore size in the layer of fine fibers that is less than the average diameter of the absorbent particles.
 - b. Claim 16 has been amended to claim that the pore sizes of the layer of meltblown are less than the average diameter of the absorbent particles.
 - c. Claim 24 has been amended to claim that the pore sizes of the layer of meltblown fibers are less than about 25 microns and the property of SAM retention level in the nonwoven fabric laminate.
 - d. Claims 17 and 31 are canceled.

Terminal Disclaimer

2. The terminal disclaimer filed on August 01, 2005 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of any patent granted of Application No. 10/657,498 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7-8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over THOMAS et al. (US 6,049,024) in view of KELLENBERGER (US 5,147,343).

THOMAS et al. is directed to a composite nonwoven fabric for use as a one-piece top sheet and barrier fabric for disposable absorbent articles. (Abstract) In one embodiment of their invention, the reference teaches a spunbond-meltblown-spunbond trilaminate structure. (Col. 3, lines 65-67). The reference teaches the use of meltblown filaments of from about 2-15 microns in diameter. (Col. 5, lines 62-67) The spunbond filaments can be prepared from thermoplastic polymers. (Col. 6, lines 18-38) The nonwoven composite fabric can have an overall basis weight of from about 13 to 22 gsm. The spunbond and meltblown web components of the composite nonwoven fabric can be present in a ratio of from about 11 gsm to 1.5 gsm, respectively, up to about 19 gsm to 3 gsm. (Col. 6, lines 47-55) This is interpreted by the Examiner as the basis weight of the meltblown web being in the range from 1.5-3 gsm. The reference also teaches the use of a surfactant to provide hydrophilicity to the composite. (Col. 7, lines 1-5) THOMAS et al. further teaches that the disposable absorbent articles comprise a topsheet, a liquid impervious back sheet and a core of absorbent material. (Col. 8, lines 1-3)

THOMAS et al. is silent to the inclusion of absorbent particles and the pore size in the layer of fine fibers in relation to such absorbent particles.

KELLENBERGER disclose an absorbent composite that comprises a porous matrix of fibers, and a superabsorbent material dispersed among the interfiber spaces (pores) and at least about 50% of the superabsorbent material has a size greater than the median pore size of the matrix. (Abstract) The porous matrix fibers may be a batt of fluff. (Refer to Col. 4, lines 20-30)

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The reference further teaches that the superabsorbent material should have a size in the unswollen condition, which is greater than the median interfiber spaces (pores) of the matrix. (Col. 7, lines 29-36) It is further noted that the reference teaches using particles with a size greater than about 100 microns. (Col. 7, lines 65-66) While the reference is silent to using pore sizes of the layer of meltblown fibers being less than about 25 microns, such values would have been obvious from the teachings of the reference and one could conclude that values in the range claimed herein would have been obvious given that the particles could have diameters greater than about 100 microns.

It would have also been obvious at the time the invention was made to a person having ordinary skill in the art to modify the absorbent material of THOMAS et al. and provide it absorbent particles in which the pore size of the layer of fine fibers is less than the average diameter of the absorbent particles (or in which the diameter of the particles is greater than the pores of the fibers), with the motivation of minimizing the effects of gel-blocking as disclosed by KELLENBERGER (Col. 7, lines 29-31)

5. Claims 6, 9, 10-12, 16, 18-22, 24-30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over THOMAS et al. and KELLENBERGER as applied above, and further in view of GOLDWASSER (US 6,183,847).

THOMAS et al. fails to teach a basis weight of less than 1.5 gsm for the thin layer of fine fibers/meltblown layer.

GOLDWASSER discloses a coversheet or coverstock or top sheet (i.e., that portion of the product which is in contact with a person's skin) for use in the manufacturing of disposable absorbent products such as baby diapers and sanitary napkins. (Col. 1, lines 13-18) The

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reference teaches using a web that is a multi-component structure that includes at least one discontinuous fine fiber layer having a melt-blown content of greater than zero but less than 1.5 gsm. This provides for enhanced liquid containment and enhanced liquid transport in a single web. (Col. 2, lines 52-56) The reference teaches a SMS construction and also teaches the optional use of carded layers instead of solely spun-bonded layers as the outer layers. (Col. 5, lines 15-45)

Since the references are directed to disposable absorbent garments the purpose disclosed by GOLDWASSER would have been recognized in the pertinent art of THOMAS et al. and KELLENBERGER.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disposable garment of THOMAS et al. and provide with a thin layer of fine fibers in the bodyside liner with a basis weight of less than 1.5 gsm with the motivation of enhancing the liquid containment and liquid transport in a single web as disclosed by GOLDWASSER above.

Although the prior art of record does not explicitly teach the claimed SAM retention it is reasonable to presume that this property is inherent to a material produced from the teachings of the prior art above. Support for said presumption is found in the use of like materials (i.e. an SMS laminate construction with a meltblown layer with similar basis weight). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a SAM retention level of greater than 95 percent (or 98 percent), would obviously have been present once the laminate product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC

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102. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner, et al.* (CCPA) 186 USPQ 80

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over THOMAS et al. (US 6,049,024) in view of KELLENBERGER (US 5,147,343) as applied above, and further in view of RHIM (US 5,342,335).

RHIM also relates to disposable absorbent products and teaches the use of poly(vinyl alcohol) fibers in the construction of nonwoven materials for such applications (i.e. diapers, wipes, training pants, sanitary napkins, among others). (Refer to claims)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use polyvinyl alcohol fibers motivated by the desire of increasing the absorbency capacity of the absorbent layer by using fibers that are hydrophilic and appropriate for the applications of THOMAS et al.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over THOMAS et al. KELLENBERGER and GOLDWASSER as applied above, and further in view of VUKOS et al. (WO 02/34184)

VUKOS et al. is also directed to absorbent garments and teaches the use of necking to produce a stretchable/extensible absorbent assembly. (Refer to abstract; page 6, lines 3-11; page 7, lines 20-23; claims) Therefore, it would have been obvious to one of ordinary skill in the art to neck the laminate motivated by the desire of providing the assembly with stretchable/extensible properties as taught by VUKOS et al. above.

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Norca L. Torres-Velazquez
Primary Examiner
Art Unit 1771

August 19, 2005